File #	Original File Name
1	EPA_SS_ST_LOUIS_MET_5MIN_20020601_20020630_V1.csv
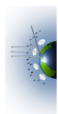
| Data Exchange Standard Version	Principal Investigator Name--last first	Principal Investigator Affiliation	File Contents Description--short long	Sampling Interval As Reported in Main Table
NARSTO 2002/05/28 (2.301)	Turner ; Dr. Jay	Washington University, Campus Box 1198, One Brookings Drive, St. Louis, MO 63130	Meteorology ; Meteorology	5 minute

Sampling Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name	Data Usage Acknowledgement	Study Or Network Acronym
Same as sampling interval	2	EPA_PM_SS	EPA Particulate Matter Supersites Program	St. Louis - Midwest Supersite and Washington University	EPA_SS_ST_LOUIS

Study Or Network Name	Country Code	State Or Province Code	Principal Investigator Contact Information	Co-investigator Name--last first	Co-investigator Affiliation
EPA_Supersites--St. Louis	US	IL	Dr. Jay Turner, Washington University, Campus Box 1198, One Brookings Drive, St. Louis, MO 63130	Not Applicable ; None	Not Applicable

Name And Affiliation Of Person Who Generated This File	Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File
Jay Turner, Washington University	2003/05/20	MS Excel

Companion File Name format And Version	Date This File Generated archive Version Number	Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values
None ; None	2004/09/19 ; 1	Zero or negative values are physically possible for some parameters	Undetermined

| Table Explanation Of Reported Uncertainty	Table User Note	Table User Note2	Table User Note3	Table User Note4	Table Name	Table Focus
See *TABLE USER NOTE2	Meteorology	manufactuer-reported sensor precision where available			Meteorology	Surface--fixed
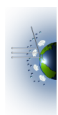
Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)
ES2SUSMOESL_	13th and Tudor, East St. Louis	IL	38.61220	-90.16030	.	135.0

Site ID	Site land use	Site location setting	Measurement start date	Measurement end date	Co-incident measurements	Study site ID	Lat lon accuracy
ES2SUSMOESL_	Residential	Suburban	2002/06/01	2002/06/30	None	None	-999.9
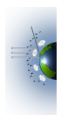
Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
M1	Missing value because no value is available
M2	Missing value because invalidated by data originator
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
V3	Valid interpolated value
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
V7	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
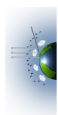
Site ID: **ES2SUSMOESL_**   Variable name: **Humidity: relative**   Units: **%**   Sampling interval: **5 minute**   Sampling frequency: **Same as sampling interval**
Observation type: **Meteorology**   Field sampling or measurement principle: **Capacitance thin film humidity**   Sampling Height above ground (m): **2**
Instrument name and model number: **Climatronics 102425 lithium chloride sensor**   Measurement principal investigator: **Turner, Dr. Jay**
Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **26**
25th Percentile: **48**
Median: **64**
Mean: **63.148**
75th Percentile: **80**
Maximum: **95**
Stnd Dev.: **17.968**

NARSTO Flags

Flag Symbol Count

M2:   **16**

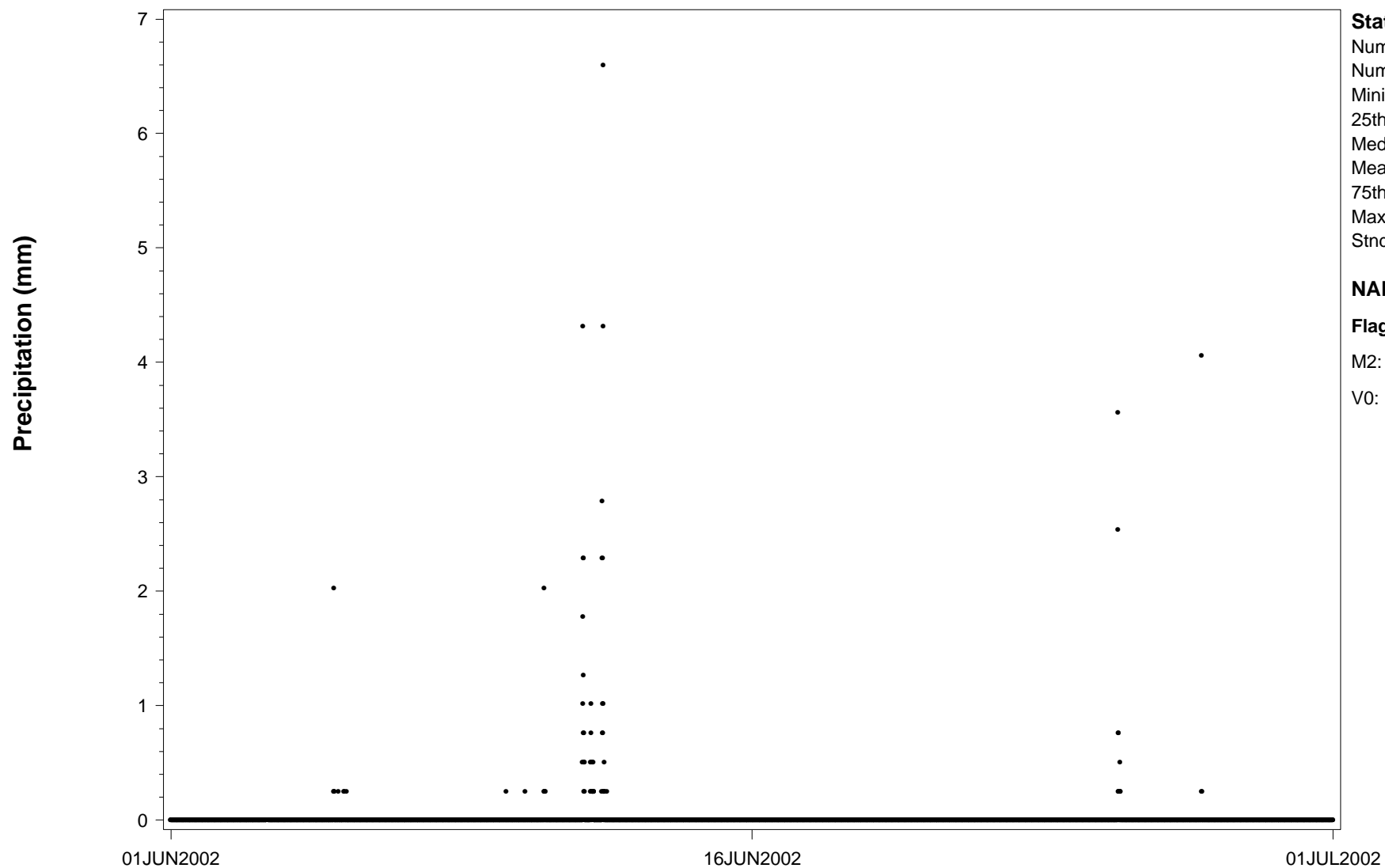V0:   ●   **8,624**

Time Zone: CST
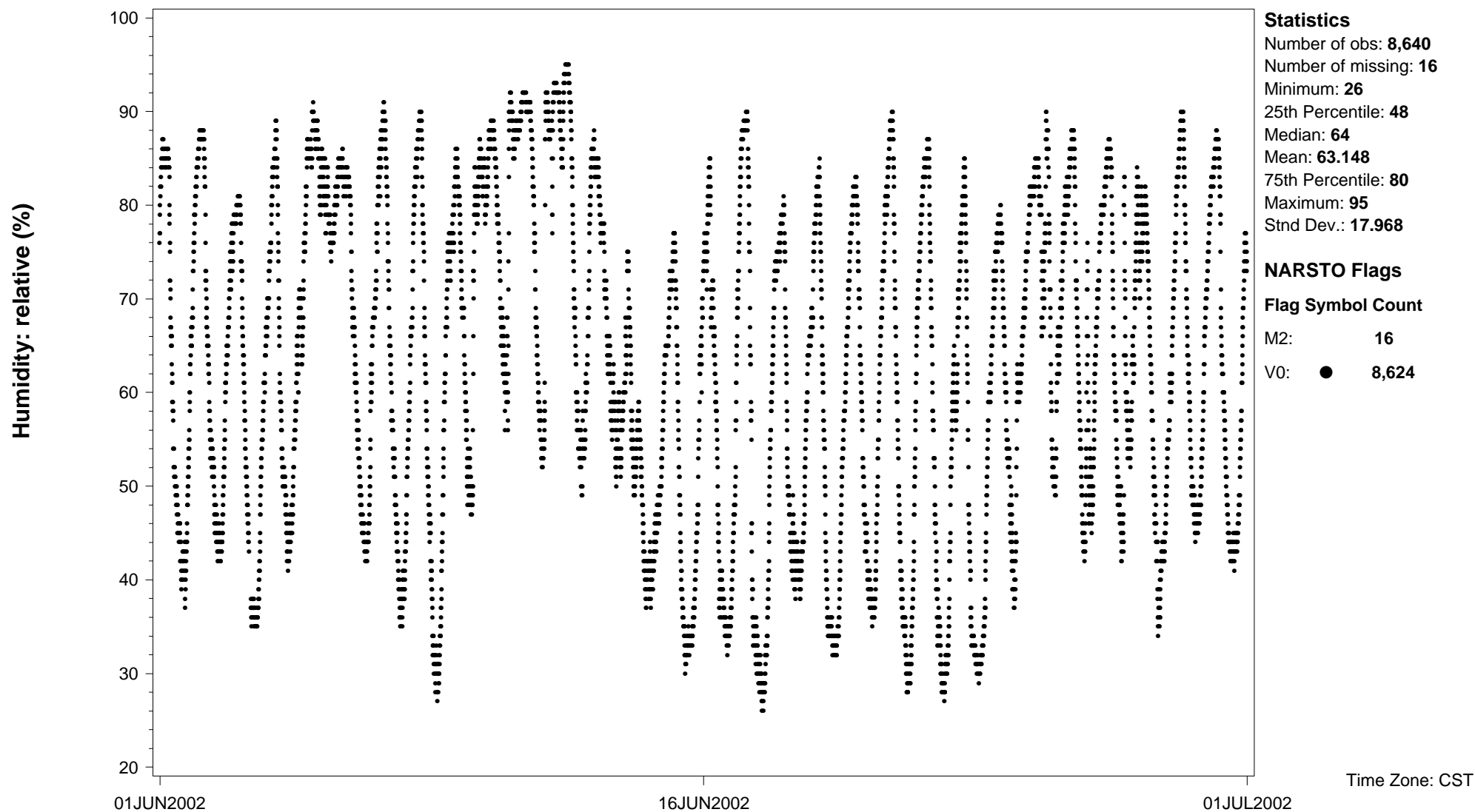
Site ID: **ES2SUSMOESL_**   Variable name: **Precipitation**   Units: **mm**   Sampling interval: **5 minute**   Sampling frequency: **Same as sampling interval**
Observation type: **Meteorology**   Field sampling or measurement principle: **Rain gauge**   Sampling Height above ground (m): **3**
Instrument name and model number: **Climatronics 100097-1-G0 tipping bucket**   Measurement principal investigator: **Turner, Dr. Jay**
Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0**
25th Percentile: **0**
Median: **0**
Mean: **0.008**
75th Percentile: **0**
Maximum: **6.6**
Stnd Dev.: **0.141**

NARSTO Flags

Flag Symbol Count

M2:   **16**

V0:   ●   **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_** Variable name: **Pressure: atmospheric barometric** Units: **hPa** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Meteorology** Field sampling or measurement principle: **Transducer**
Sampling Height above ground (m): **1** Instrument name and model number: **Climatronics 102270-G3 barometer**
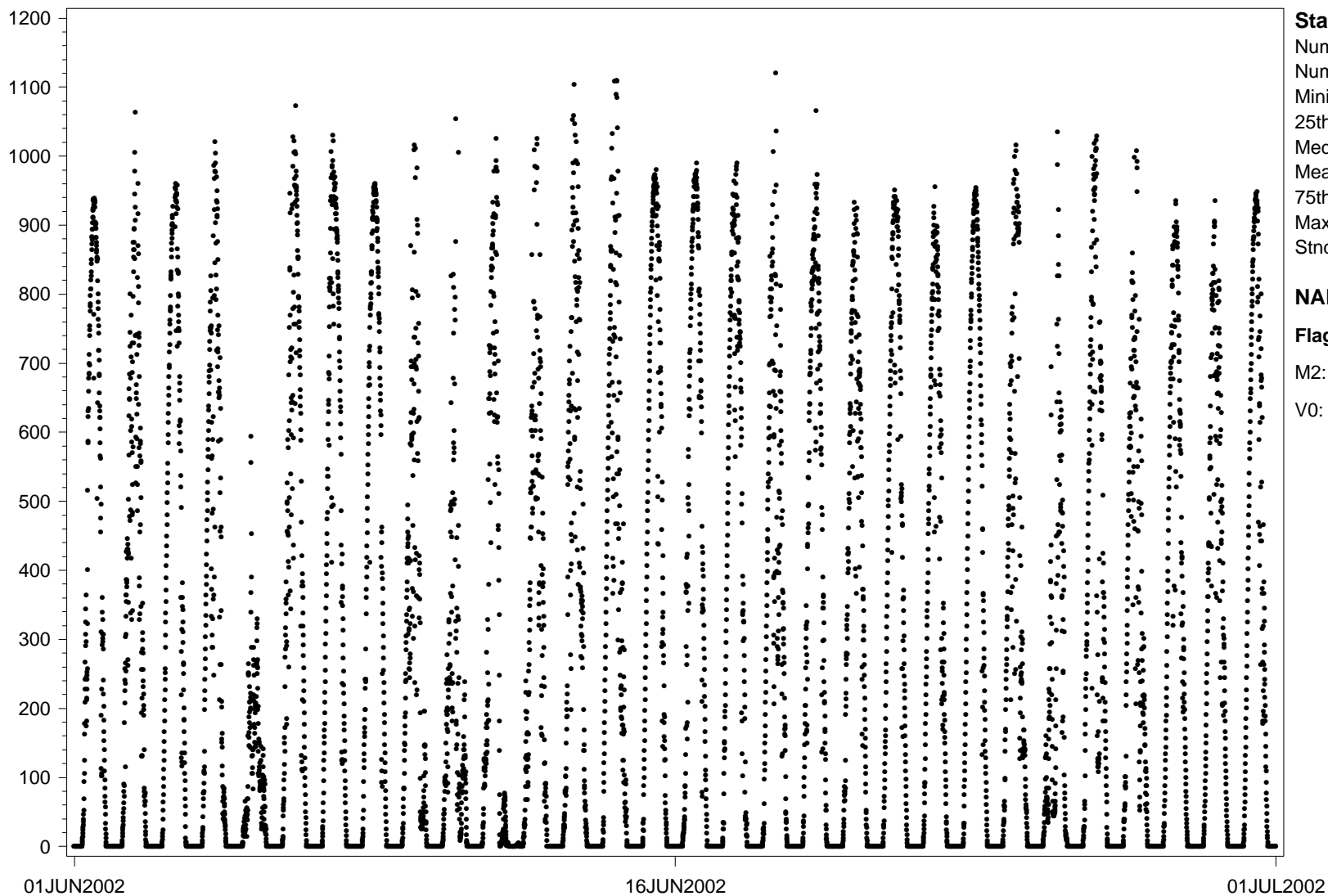Measurement principal investigator: **Turner, Dr. Jay** Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **992.58**
25th Percentile: **996.68**
Median: **1000.02**
Mean: **1000.334**
75th Percentile: **1003.18**
Maximum: **1012.25**
Stnd Dev.: **4.345**

NARSTO Flags

Flag Symbol Count

M2: **16**

V0: ● **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Radiation: spectral downwelling solar hemispheric irradiance**   Units: **W/m2**   Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**   Field sampling or measurement principle: **Radiometer**
Sampling Height above ground (m): **3**   Wavelength--lower bound (NM): **305**   Wavelength--upper bound (NM): **2800**
Instrument name and model number: **Climatronics CM3 102318 pyranometer**   Measurement principal investigator: **Turner, Dr. Jay**
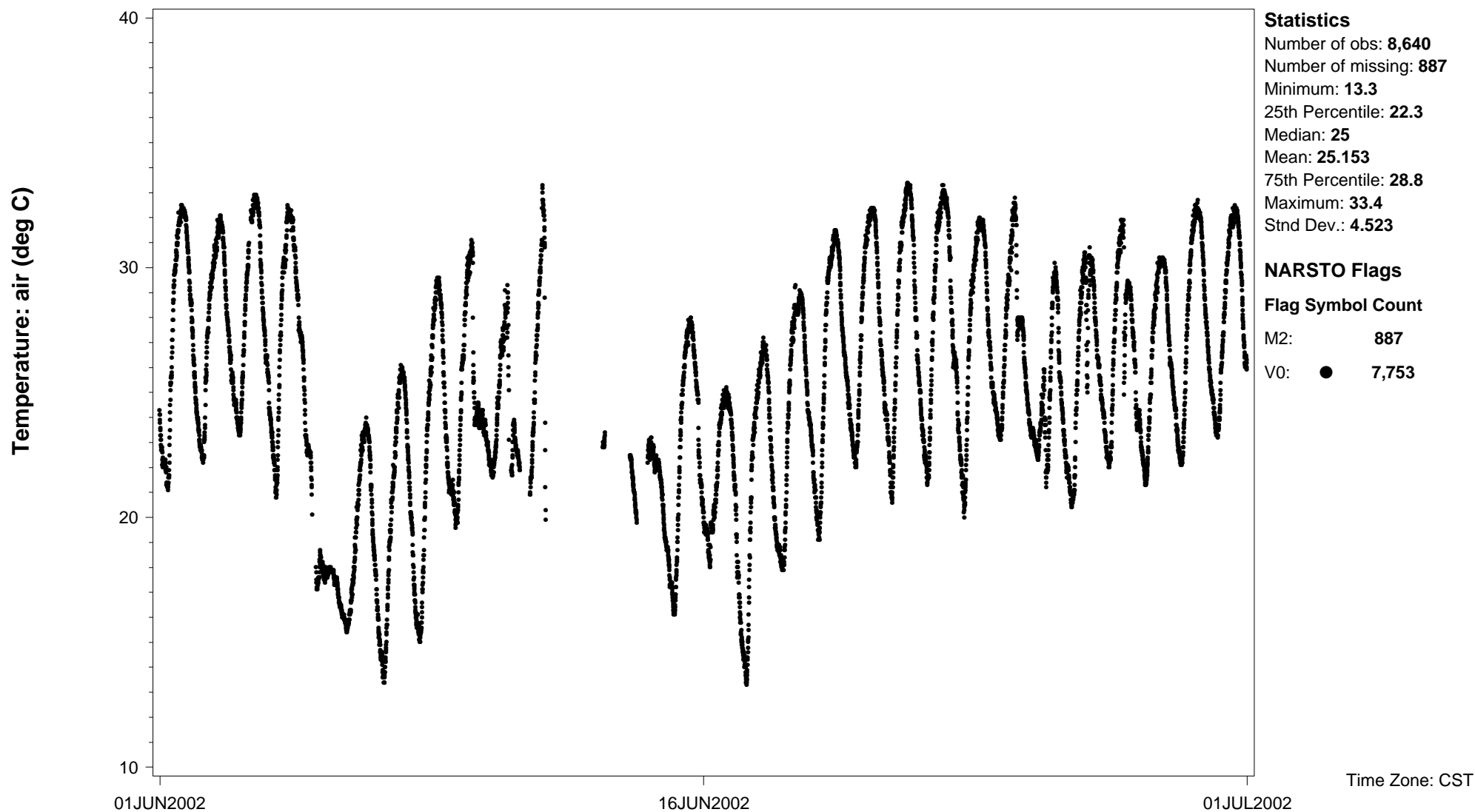Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **23**
Minimum: **0**
25th Percentile: **0**
Median: **85**
Mean: **268.071**
75th Percentile: **532**
Maximum: **1120**
Stnd Dev.: **327.136**

NARSTO Flags

Flag Symbol Count

M2:   **23**

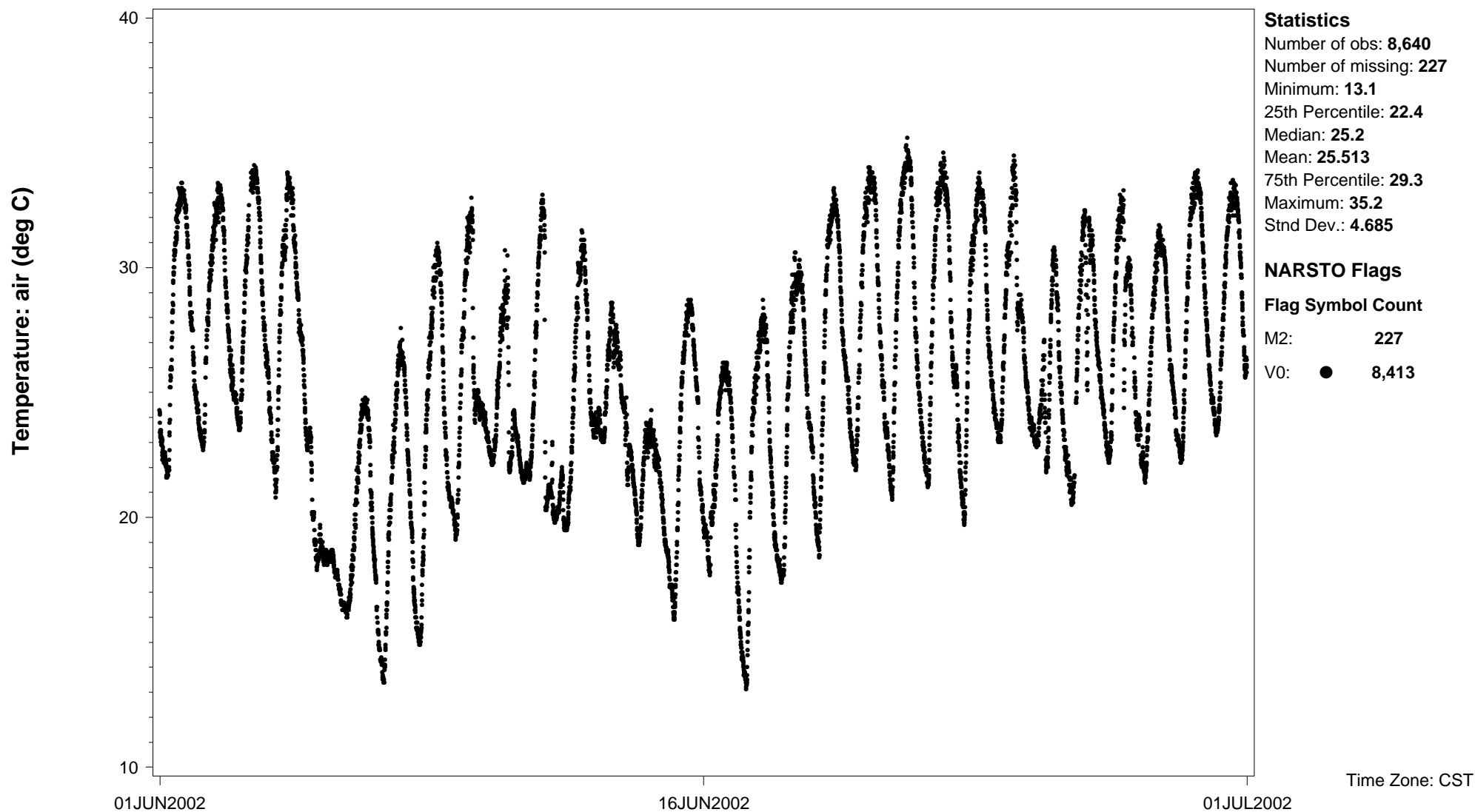V0:   ●   **8,617**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Temperature: air**   Units: **deg C**   Sampling interval: **5 minute**   Sampling frequency: **Same as sampling interval**
Observation type: **Meteorology**   Field sampling or measurement principle: **Thermistor-based temperature sensor**
Sampling Height above ground (m): **10**   Instrument name and model number: **Climatronics 100093 thermocouple**
Measurement principal investigator: **Turner, Dr. Jay**   Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **887**
Minimum: **13.3**
25th Percentile: **22.3**
Median: **25**
Mean: **25.153**
75th Percentile: **28.8**
Maximum: **33.4**
Stnd Dev.: **4.523**

NARSTO Flags

Flag Symbol Count

M2:   **887**

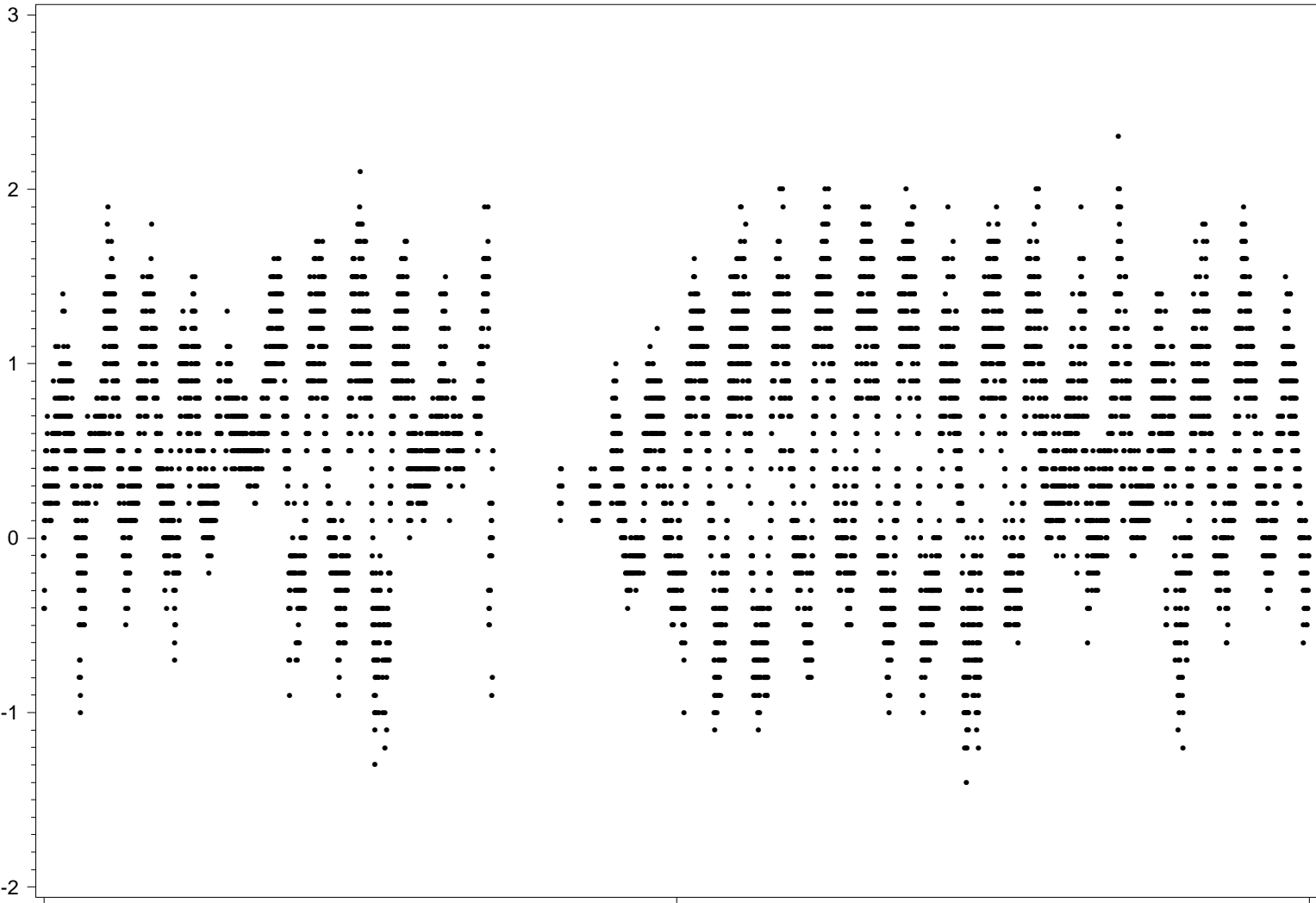V0:   ●   **7,753**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Temperature: air**   Units: **deg C**   Sampling interval: **5 minute**   Sampling frequency: **Same as sampling interval**
Observation type: **Meteorology**   Field sampling or measurement principle: **Thermistor-based temperature sensor**   Sampling Height above ground (m): **2**
Instrument name and model number: **Climatronics 100093 thermocouple**   Measurement principal investigator: **Turner, Dr. Jay**
Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **227**
Minimum: **13.1**
25th Percentile: **22.4**
Median: **25.2**
Mean: **25.513**
75th Percentile: **29.3**
Maximum: **35.2**
Stnd Dev.: **4.685**

NARSTO Flags

Flag Symbol Count

M2:   **227**

V0:   ●   **8,413**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Temperature: vertical delta (2m-10m)**   Units: **deg C**   Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**
Field sampling or measurement principle: **Thermistor-based temperature sensor**
Instrument name and model number: **Climatronics 100093 thermocouple**   Measurement principal investigator: **Turner, Dr. Jay**
Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **1,098**
Minimum: **-1.4**
25th Percentile: **0**
Median: **0.5**
Mean: **0.476**
75th Percentile: **1**
Maximum: **2.3**
Stnd Dev.: **0.625**

NARSTO Flags

Flag Symbol Count

M2:   **1,098**

V0:   ●   **7,542**

Time Zone: CST

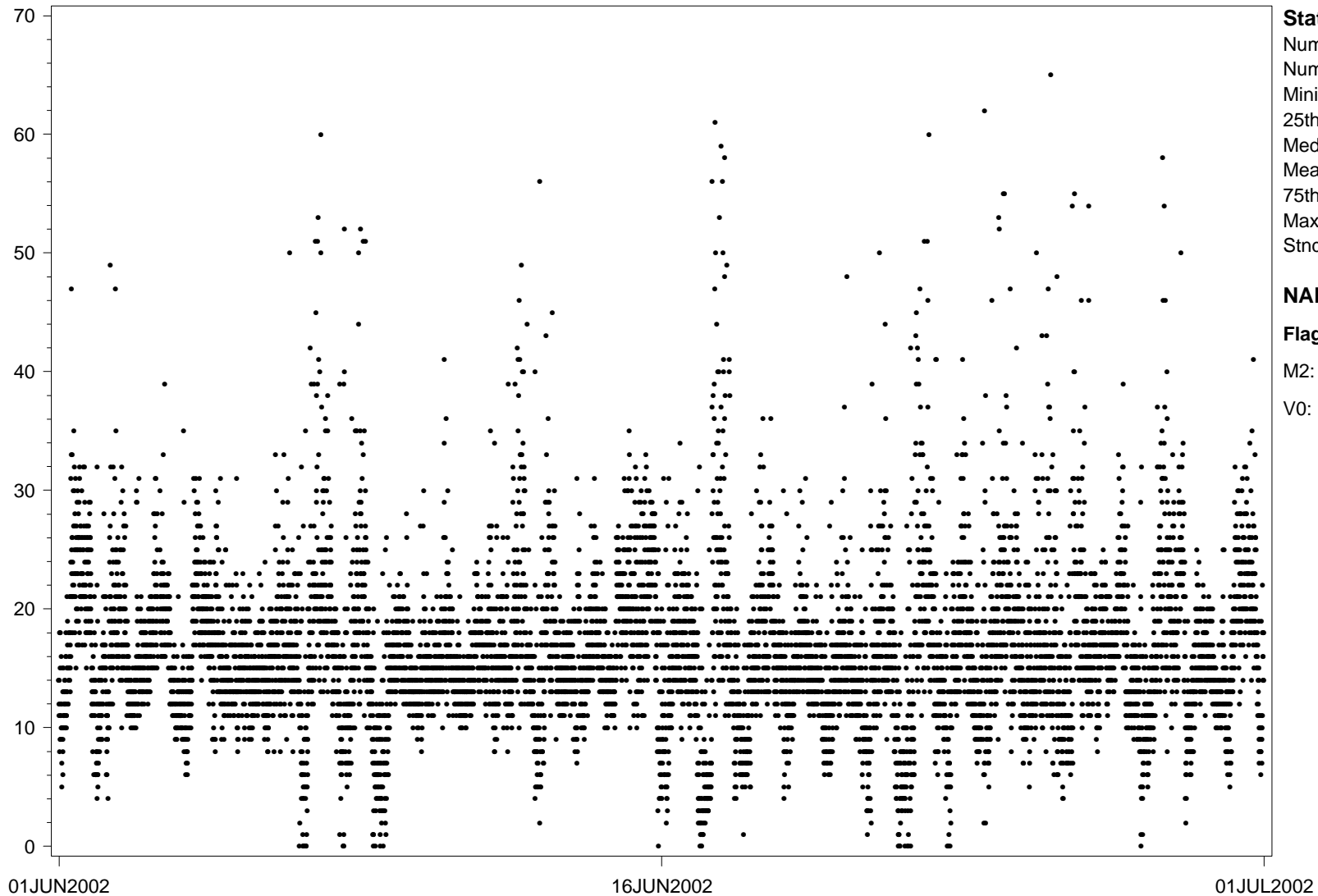01JUN2002   16JUN2002   01JUL2002

Site ID: **ES2SUSMOESL_**   Variable name: **Wind direction: Sigma theta (std. dev. of azimuth angle)**   Units: **decimal degree**   Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**   Field sampling or measurement principle: **Wind direction vane**
Sampling Height above ground (m): **10**   Instrument name and model number: **Climatronics 102083-G0-H0 wind vane**
Measurement principal investigator: **Turner, Dr. Jay**   Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0**
25th Percentile: **13**
Median: **16**
Mean: **16.584**
75th Percentile: **20**
Maximum: **65**
Stnd Dev.: **6.876**

NARSTO Flags

Flag Symbol Count

M2:   **16**
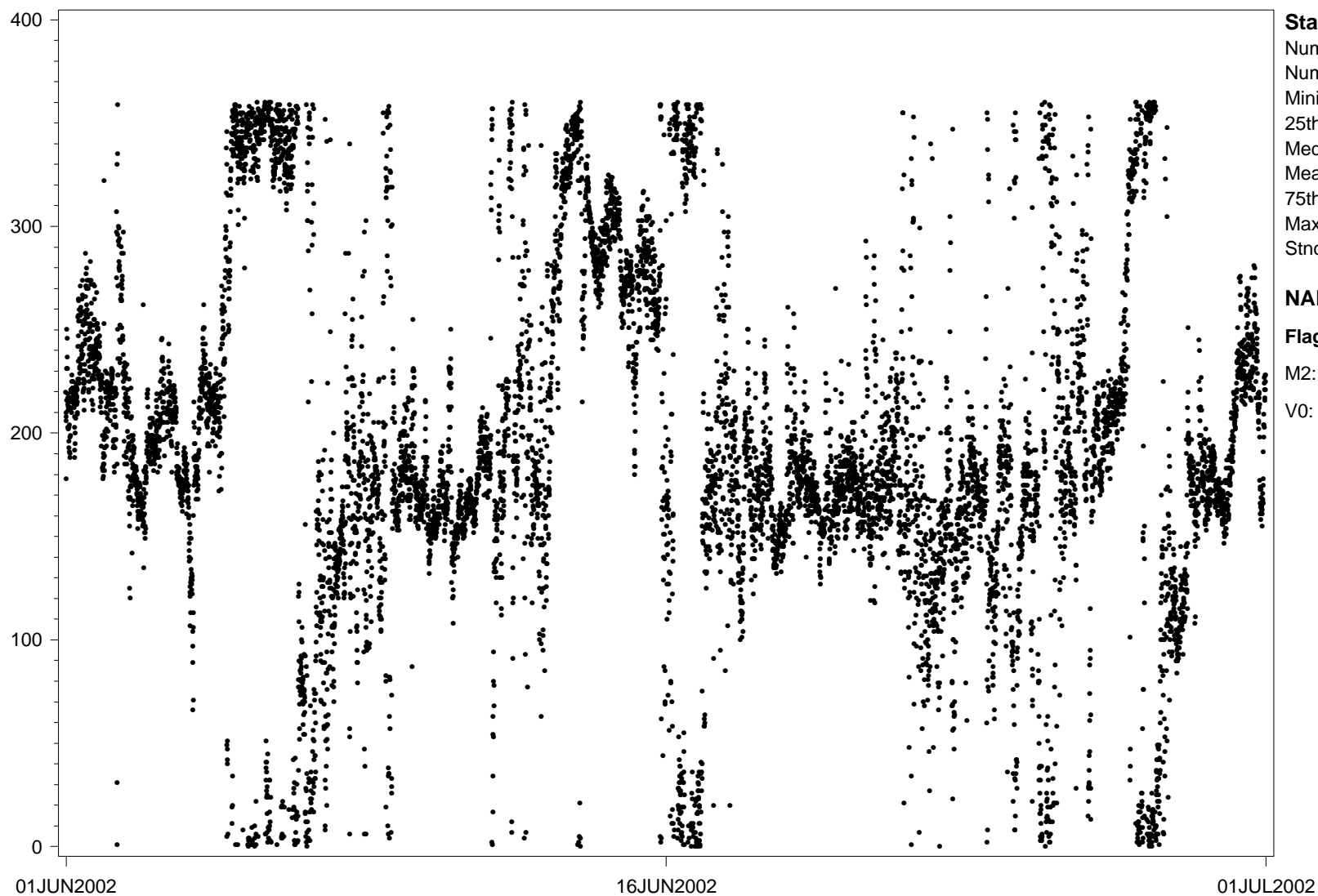
V0:   ●   **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Wind direction: horizontal resultant vector mean**   Units: **decimal degree**   Basis: **Referenced to true North**
Sampling interval: **5 minute**   Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**
Field sampling or measurement principle: **Wind direction vane**   Sampling Height above ground (m): **10**
Instrument name and model number: **Climatronics 102083-G0-H0 wind vane**   Measurement principal investigator: **Turner, Dr. Jay**
Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0**
25th Percentile: **157**
Median: **184**
Mean: **196.124**
75th Percentile: **235**
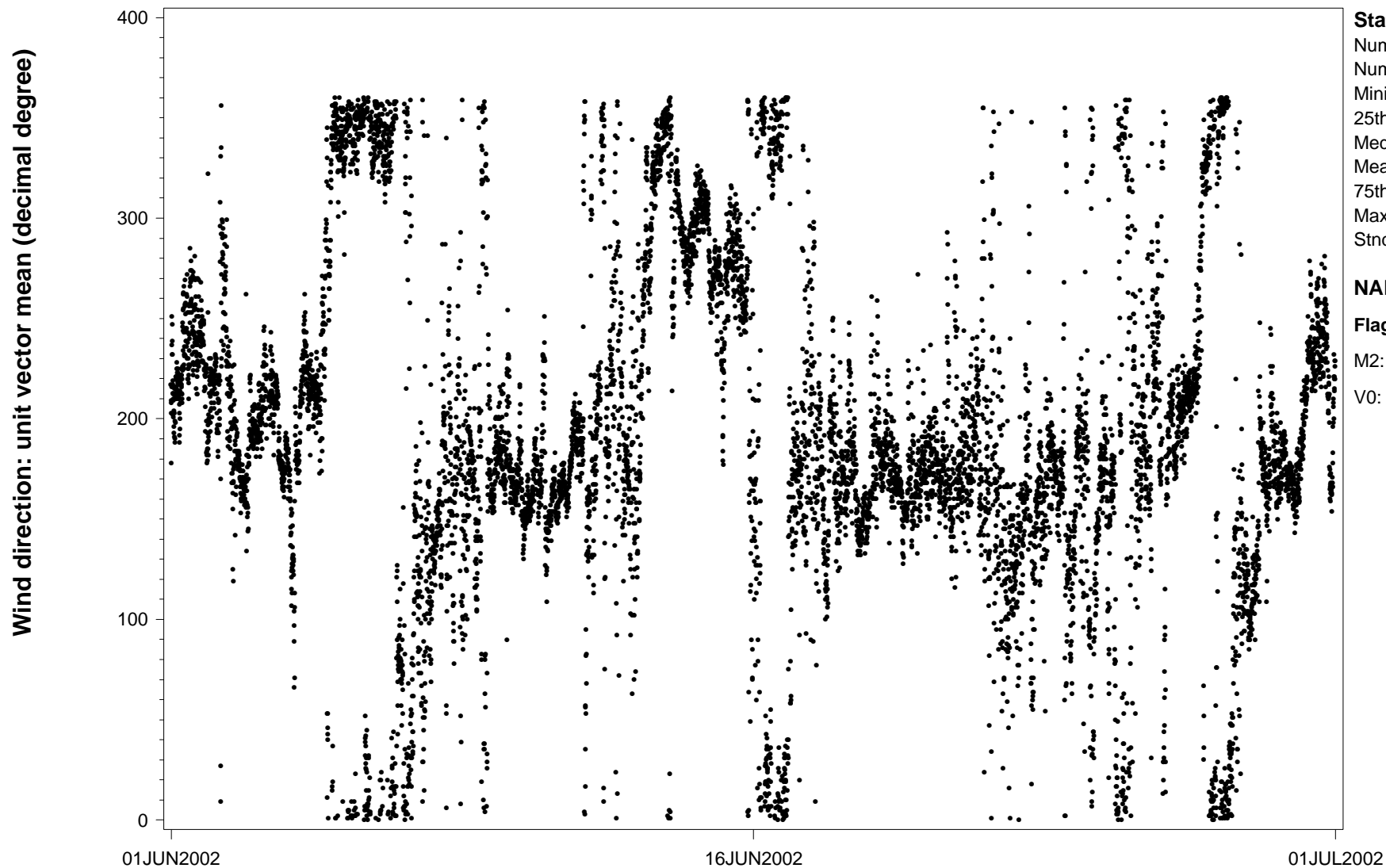Maximum: **360**
Stnd Dev.: **79.250**

NARSTO Flags

Flag Symbol Count

M2:   **16**

V0:   ●   **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Wind direction: unit vector mean**   Units: **decimal degree**   Basis: **Referenced to true North**
Sampling interval: **5 minute**   Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**
Field sampling or measurement principle: **Wind direction vane**   Sampling Height above ground (m): **10**
Instrument name and model number: **Climatronics 102083-G0-H0 wind vane**   Measurement principal investigator: **Turner, Dr. Jay**
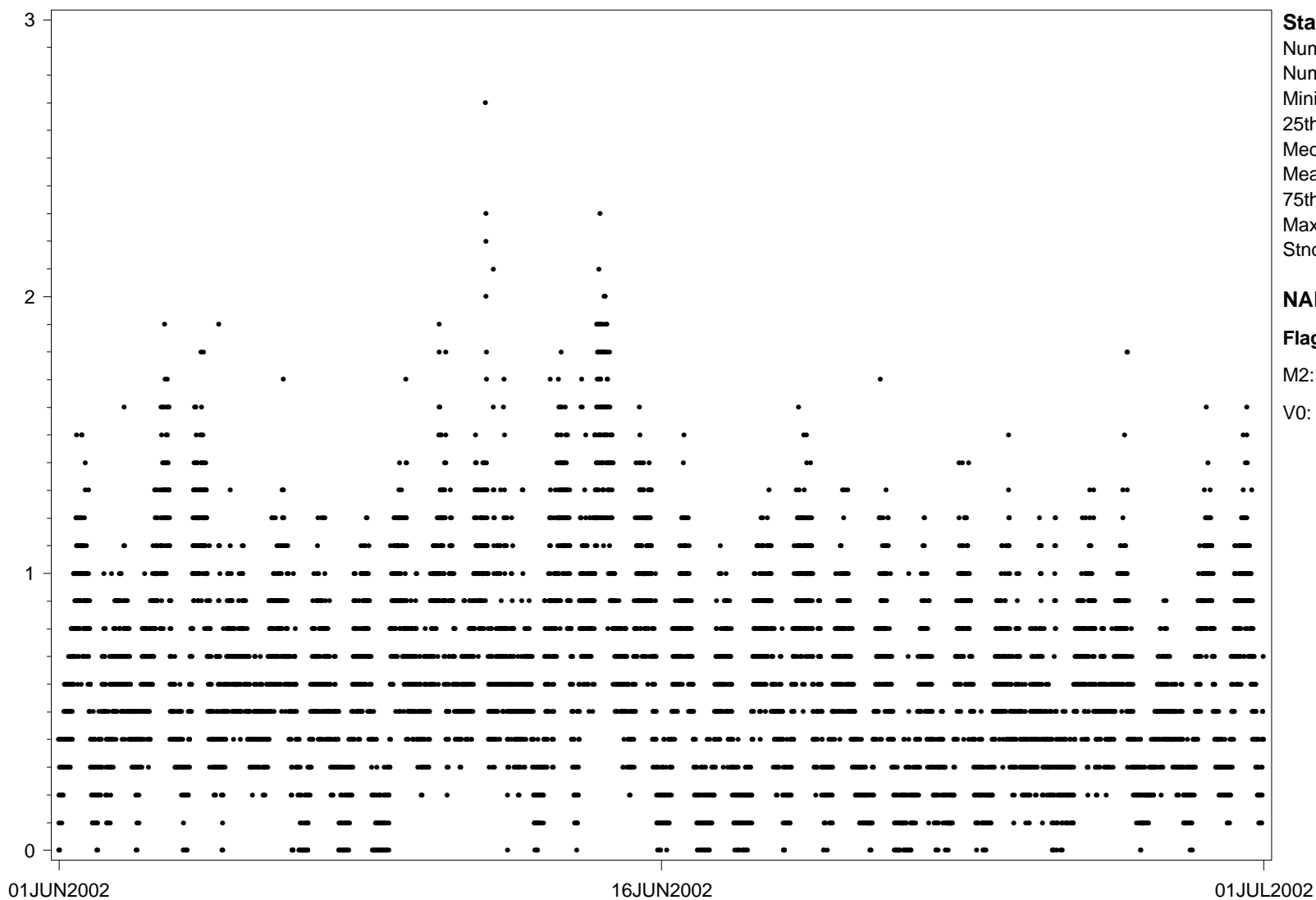Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0**
25th Percentile: **157**
Median: **185**
Mean: **195.552**
75th Percentile: **235**
Maximum: **360**
Stnd Dev.: **79.450**

NARSTO Flags

Flag Symbol Count

M2:   **16**

V0:   ●   **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Wind speed: Sigma phi (horizontal standard deviation)**   Units: **m/s**   Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**   Field sampling or measurement principle: **Anemometer--cup**
Sampling Height above ground (m): **10**   Instrument name and model number: **Climatronics 102083-G0-H0 anemometer**
Measurement principal investigator: **Turner, Dr. Jay**   Detection Limit: **Pending assignment**
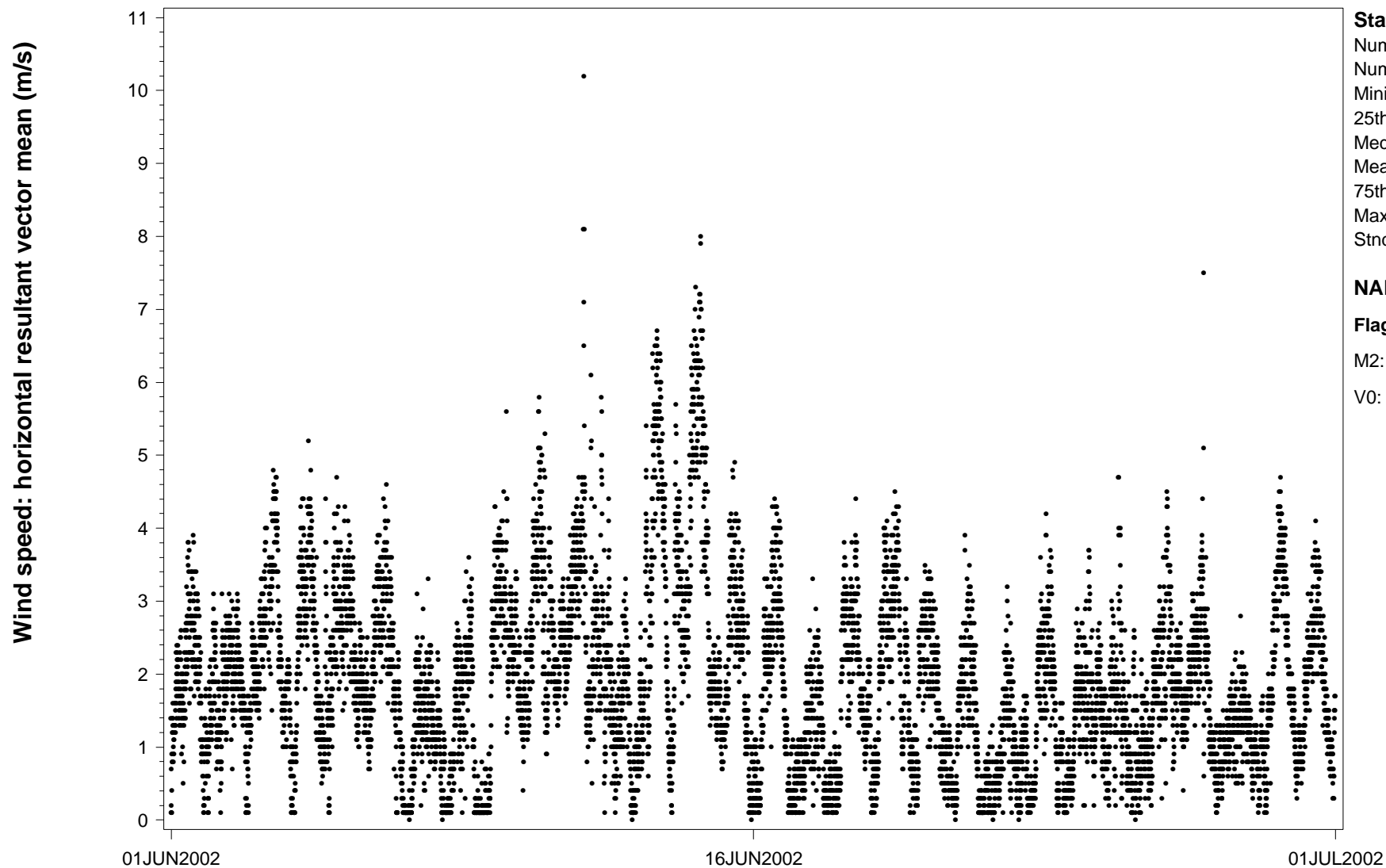
Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0**
25th Percentile: **0.3**
Median: **0.5**
Mean: **0.573**
75th Percentile: **0.8**
Maximum: **2.7**
Stnd Dev.: **0.357**

NARSTO Flags

Flag Symbol Count

M2:   **16**

V0:   ●   **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Wind speed: horizontal resultant vector mean**   Units: **m/s**   Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**   Field sampling or measurement principle: **Anemometer--cup**
Sampling Height above ground (m): **10**   Instrument name and model number: **Climatronics 102083-G0-H0 anemometer**
Measurement principal investigator: **Turner, Dr. Jay**   Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0**
25th Percentile: **1**
Median: **1.8**
Mean: **1.884**
75th Percentile: **2.6**
Maximum: **10.2**
Stnd Dev.: **1.211**

NARSTO Flags

Flag Symbol Count

M2:   **16**

V0:   ●   **8,624**

Time Zone: CST

Site ID: **ES2SUSMOESL_**   Variable name: **Wind speed: horizontal scalar mean**   Units: **m/s**   Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval**   Observation type: **Meteorology**   Field sampling or measurement principle: **Anemometer--cup**
Sampling Height above ground (m): **10**   Instrument name and model number: **Climatronics 102083-G0-H0 anemometer**
Measurement principal investigator: **Turner, Dr. Jay**   Detection Limit: **Pending assignment**

Site Name:**13th and Tudor, East St. Louis, Missouri** Latitude:**38.6122 deg.** Longitude:**-90.1603 deg.** Start Date:**2002-06-01** End Date:**2002-06-30**

Statistics
Number of obs: **8,640**
Number of missing: **16**
Minimum: **0.1**
25th Percentile: **1.1**
Median: **1.9**
Mean: **2.001**
75th Percentile: **2.8**
Maximum: **10.5**
Stnd Dev.: **1.262**

NARSTO Flags

Flag Symbol Count

M2:   **16**

V0:   ●   **8,624**

Time Zone: CST